

## Remarks

### I. Interview Summary

The Examiner is thanked for the courtesies extended during the telephonic interview conducted on February 26, 2010. No agreement as to the claims was reached during the interview.

### II. Status of the Claims

Claims 1 and 4-35 are pending. Claims 2 and 3 have been cancelled. Reconsideration of the claims is requested.

### III. Claim Rejections - 35 U.S.C. §§ 102 & 103

Claims 1, 4-11, 19-29, 32, and 34-35 stand rejected under 35 U.S.C. § 102 as allegedly anticipated by International Patent Application Publication No. WO02/057772, to Moreton (the "'772 publication"). Claims 1 and 4-35 stand rejected under 35 U.S.C. § 103 as allegedly obvious over the '772 publication. Applicant respectfully disagrees with both rejections.

The indicating desiccant claimed in the instant application "is essentially copper-free, or when copper is present it is in an amount which is less than 0.002% by weight with respect to the anhydrous silica-based material." Nothing in the '772 publication teaches a combination of Fe and Br salts to provide an indicator that works below 20% relative humidity with a copper level below 0.002% by weight. To the contrary, the '772 publication has multiple aspects that would direct one of skill in the art away from the claimed invention and would prevent the disclosure of any range with sufficient specificity to anticipate the claims.

A. The '772 publication does not teach the copper limitation of the claims, and in fact it teaches away from that limitation.

The '772 publication can not anticipate the claims of the instant application, because it does not disclose the claimed range copper range with sufficient specificity to constitute an anticipation of the claims. *See, e.g., Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991, 999, 78 U.S.P.Q.2d 1417, 1423 (Fed. Cir. 2006). Moreover, the claims of the instant application are not obvious in light of the '772 publication, because the '772 publication does not teach the limitations and, in fact, teaches away from them.

Although the '772 publication states that "the source of copper...is up to 0.5 per cent by weight of the silica-based material," ('772 application, page 2, lines 23-25), the '772 publication states that the lowest useful range of copper is "in the range 0.002 to 0.1 per cent by weight." ('772 application, page 2, line 26). The successive ranges recited in the '772 publication only increase the amount of copper, they do not decrease it. ('772 application, page 2, lines 26-28). There could not be a more clear example of "teaching away" from an invention than that provided by the '772 publication, where the '772 publication teaches the opposite of the claimed invention.

In the "Response to Arguments," the Office Action asserts that the disclosure of "**up to** 0.5 percent ... expressly encompasses copper-free and less than 0.002% by weight." (Office Action, pages 10-11) (emphasis in original). That argument ignores the express teachings and intent of the '772 publication. The '772 publication purports to be "A new system based on copper salts...." ('772 publication, page 2, line 6). All of the stated embodiments of the '772 publication include copper. The abstract of the '772 publication states that the indicating desiccant includes "a source of copper."

Put simply, the disclosure of "up to 0.5%" in the '772 publication can not teach claim limitations that are "essentially copper free" or "less than 0.002% by weight." The '772

publication does not teach a composition where copper is an optional component that may be present "up to" a given percentage, but where the composition would still function if copper were included. If the composition of the '772 publication were copper-free, or if it had less than 0.002% copper, the entire disclosure would be frustrated.

B. The '772 publication does not teach or suggest a color change below 20% relative humidity.

The claims of the instant application require a color change below 20% relative humidity. The '772 publication, on the other hand, limits the color change to an equilibrium relative humidity "between 20 to 30 per cent." ('772 publication, page 3, lines 13-14). The reason for this is clear: the desiccant of the '772 publication is intended to reduce the relative humidity of a gas to below 30%, then the desiccant is to be replaced. ('772 publication, page 3, lines 13-15)

The "below 30%" statement in the '772 publication should not be cited to anticipate the "below 20%" limitation in the instant application, because the "below 30%" statement in the '772 publication is relevant only to reduction of relative humidity, not to indication of the reduction of relative humidity. For that purpose, the '772 publication only provides the "between 20 to 30 per cent" limitation. Moreover, there is no motivation to decrease the level of the indicator below 20% in the '772 publication, because the desiccant is only intended to be effective to a level below 30 per cent - that is, just below 30 per cent - and not, significantly, a level "up to" 30 per cent, which the '772 publication could have included if such were the intent.

C. Reduction of copper in the '772 publication would not lead to a reduction in the ability to work below 20% relative humidity.

Even if the '772 publication could be read to teach a desiccant that "is essentially copper-free, or when copper is present it is in an amount which is less than 0.002% by weight," or if it

could be read to teach "indicating humidity at a relative humidity below 20% by a color change" (both of which applicant denies), it could not be read to teach both at once. The '772 publication teaches that a higher Br:Cu ratio leads to an increase in the relative humidity for a color change. ('772 publication, page 13, lines 10-11).

Even if one skilled in the art were motivated by the '772 publication to prepare a desiccant with a color change below 20% relative humidity, he would not do so by decreasing or eliminating copper. Instead, he would increase the amount of copper, decreasing the Br:Cu ratio and decreasing the percentage of relative humidity at which the color change occurs. This further demonstrates that the '772 publication teaches away from the claimed invention.

C. Iron provides the active indicator system in the instant application.

Finally, applicant notes that the obviousness rejection of claims 1 and 4-35 is also infirm because one of skill in the art would not attempt to modify the '772 publication to arrive at the claimed invention. There would be no expectation of success in such a modification. In the '722 publication, the active indicator system is a copper-based system. The only use of iron is as a dye. The instant application, on the other hand, has an active indicator system provided by the iron and bromide. One of skill in the art would not attempt to modify a copper-based system to arrive at an iron-based system.

#### IV. Conclusion

All of the pending rejections have been overcome, accommodated, or rendered moot. Withdrawal of the rejections as well as reconsideration and allowance of all of the pending claims are requested. If the Examiner believes that a telephone call might resolve any outstanding issues in this application, he is encouraged to call the undersigned at the number below.

Respectfully submitted,

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